

CPC**COOPERATIVE PATENT CLASSIFICATION****E03B**

INSTALLATIONS OR METHODS FOR OBTAINING, COLLECTING, OR DISTRIBUTING WATER (drilling wells, obtaining fluids in general from wells [E21B](#); pipe-line systems in general [F17D](#))

E03B 1/00

Methods or layout of installations for water supply([E03B 3/00](#), [E03B 9/00](#) take precedence)

[E03B 1/02](#) . for public or like main supply {for industrial use}

[E03B 1/04](#) . for domestic or like local supply

[E03B 1/041](#) .. { Greywater supply systems}

[E03B 1/042](#) ... { Details thereof, e.g. valves or pumps}

[E03B 1/044](#) { Switch valves in waste pipes}

[E03B 1/048](#) .. { Systems for collecting not used fresh water}

E03B 3/00

Methods or installations for obtaining or collecting drinking water or tap water (treatment of water [C02F](#))

[E03B 3/02](#) . from rain-water

[E03B 3/03](#) .. Special vessels for collecting or storing rain-water for use in the household, e.g. water-butts {(containers for storage, in general, [B65D](#))}

[E03B 3/04](#) . from surface water {Barrages [E02B 7/00](#)}

[E03B 3/06](#) . from underground {consolidating foundation soil by draining, e.g. by lowering the water level [E02D 3/00](#); subsoil filtering [E21B 43/02](#)}

[E03B 3/08](#) .. Obtaining and confining water by means of wells (applicable to a combination of water and other liquids or to other liquids only [E21B 43/00](#))

[E03B 3/10](#) ... by means of pit wells

[E03B 3/11](#) in combination with tubes, e.g. perforated, extending horizontally, or upwardly inclined, exterior to the pits

[E03B 3/12](#) ... by means of vertical pipe wells

[E03B 3/14](#) ... by means of horizontal or oblique wells

[E03B 3/15](#) ... Keeping wells in good condition, e.g. by cleaning, repairing, regenerating; Maintaining or enlarging the capacity of wells or water-bearing layers (with artificial enrichment [E03B 3/32](#)){(cleaning, in general [B08B](#))}

[E03B 3/16](#) ... Component parts of wells

[E03B 3/18](#) Well filters (filters in general [B01D 24/00](#) to [B01D 35/00](#))

[E03B 3/20](#) of elements of special shape

[E03B 3/22](#) Selection of specified materials {not used, documents in [E03B 3/20](#)}

[E03B 3/24](#) formed of loose materials, e.g. gravel

- E03B 3/26 with packed filtering material
- E03B 3/28 . from humid air (condensing of vapours in general [B01D 5/00](#); dehumidification of air for air-conditioning [F24F 3/14](#))
- E03B 3/30 . from snow or ice
- E03B 3/32 . with artificial enrichment, e.g. by adding water from a pond or a river {consolidating foundation soil by draining e.g. by lowering the water level [E02D 3/00](#)}
- E03B 3/34 . . of underground water
- E03B 3/36 . . of surface water
- E03B 3/38 . Curbs for springs
- E03B 3/40 . Other devices for confining, e.g. trenches, drainage

- E03B 5/00** **Use of pumping plants or installations; Layouts thereof** (pumps; pumping plants or installations per se [F04](#))

- E03B 5/02 . arranged in buildings
- E03B 5/025 . . {with surface tanks}

- E03B 5/04 . arranged in wells
- E03B 5/045 . . {with surface tanks}
- E03B 5/06 . . Special equipment, {e.g. well seals and connections for well casings or the like}

- E03B 7/00** **Water main or service pipe systems** (pipes or tubes in general [F16L](#))

- E03B 7/003 . { Arrangement for testing of watertightness of water supply conduits}
- E03B 7/006 . { Arrangements or methods for cleaning or refurbishing water conduits}
- E03B 7/02 . Public or like main pipe systems
- E03B 7/04 . Domestic or like local pipe systems (domestic plumbing [E03C 1/02](#))
- E03B 7/045 . . { diverting initially cold water in warm water supply}

- E03B 7/07 . Arrangement of devices, e.g. filters, flow controls, measuring devices, siphons, valves, in the pipe systems (devices per se, see the relevant classes for these devices)
- E03B 7/071 . . { Arrangement of safety devices in domestic pipe systems, e.g. devices for automatic shut-off}
- E03B 7/072 . . { Arrangement of flowmeters}
- E03B 7/074 . . { Arrangement of water treatment devices}
- E03B 7/075 . . { Arrangement of devices for control of pressure or flow rate}
- E03B 7/077 . . { Arrangement of backflow preventing devices}
- E03B 7/078 . . { Combined units with different devices; Arrangement of different devices with respect to each other}
- E03B 7/08 . . Arrangement of draining devices, { e.g. manual shut-off valves}(draining devices in

general F16K, F16L)

- E03B 7/09 . Component parts or accessories (tools for cleaning pipes [B08B 9/02](#); devices for preventing contamination of drinking water pipes for domestic use [E03C 1/10](#); devices for preventing damage in case of bursts of pipes [F16L](#); heating of pipes in general [F16L 53/00](#))
- E03B 7/095 .. { Component holders or housings, e.g. boundary boxes}
- E03B 7/10 .. Devices preventing bursting of pipes by freezing (devices preventing bursting of pipes in general [F16L 55/00](#))
- E03B 7/12 ... by preventing freezing
- E03B 7/14 .. Devices for thawing frozen pipes

E03B 9/00 **Methods or installations for drawing-off water** (domestic water-drawing devices [E03C](#); taps or valves per se [F16K](#))

- E03B 9/02 . Hydrants; Arrangements of valves therein; Keys for hydrants
- E03B 9/025 .. { Taps specially designed for outdoor use, e.g. wall hydrants, sill cocks}
- E03B 9/027 ... { with features preventing frost damage}
- E03B 9/04 .. Column hydrants
- E03B 9/06 ... Covers
- E03B 9/08 .. Underground hydrants
- E03B 9/10 ... Protective plates or covers
- E03B 9/12 ... Stand-pipes
- E03B 9/14 .. Draining devices for hydrants
- E03B 9/16 .. Devices for retaining foreign matter, e.g. sand
- E03B 9/18 .. Cleaning tools for hydrants
- E03B 9/20 .. Pillar fountains or like apparatus for dispensing drinking water

E03B 11/00 **Arrangements or adaptations of tanks for water supply** (water-butts [E03B 3/03](#); storage aspects [B65D](#), [B65G](#), [F17B](#), [F17C](#); foundations [E02D 27/38](#); construction or assembling of bulk storage containers employing civil engineering techniques [E04H 7/00](#); tower aspects [E04H 12/00](#))

- E03B 11/02 . for domestic or like local water supply
- E03B 11/04 .. without air regulators {i.e. without air inlet or outlet valves; water tanks provided with flexible walls}
- E03B 11/06 .. with air regulators {air receivers for water conduits [F16L 55/04](#); pressure control devices for fluids [G05D](#)}
- E03B 11/08 ... Air regulators
- E03B 11/10 . for public or like main water supply
- E03B 11/12 .. of high-level tanks
- E03B 11/14 .. of underground tanks
- E03B 11/16 .. Adaptations of devices for putting pumping plants in and out of operation, e.g. automatic control devices {not used, documents in [F04](#)}

- E03B 2001/00** **Methods or layout of installations for water supply**([E03B 3/00](#), [E03B 9/00](#) take precedence)
- E03B 2001/04 . for domestic or like local supply
- E03B 2001/041 .. { **Greywater supply systems**}
- [E03B 2001/045](#) ... using household water
- [E03B 2001/047](#) ... using rainwater
- E03B 2009/00** **Methods or installations for drawing-off water** (domestic water-drawing devices [E03C](#); taps or valves per se [F16K](#))
- E03B 2009/02 . Hydrants; Arrangements of valves therein; Keys for hydrants
- [E03B 2009/022](#) .. Hydrants with a tubular valve seat
- E03B 2011/00** **Arrangements or adaptations of tanks for water supply** (water-butts [E03B 3/03](#); storage aspects [B65D](#), [B65G](#), [F17B](#), [F17C](#); foundations [E02D 27/38](#); construction or assembling of bulk storage containers employing civil engineering techniques [E04H 7/00](#); tower aspects [E04H 12/00](#))
- [E03B 2011/005](#) . Tanks with two or more separate compartments divided by e.g. a flexible membrane